



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,416	03/13/2001	Kent H. Harle	39133-1007	2140

7590

04/09/2002

Mitchel P. Brook
LUCE, FORWARD, HAMILTON & SCRIPPS
11988 EL Camino Real
Suite 200
San Diego, CA 92130

EXAMINER

BOEHLER, ANNE MARIE M

ART UNIT

PAPER NUMBER

3611

DATE MAILED: 04/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/805,416

Applicant(s)
Harle et al.

Examiner
Anne Marie Boehler

Art Unit
3611



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

Art Unit: 3611

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 8-10, 12-13, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rioux et al. (USPN 5,607,026).

Rioux '026 shows a snowmobile with an engine 22, and a support member, shown in Figure 3 to be U-shaped, and having a side 42 to which two pulleys 20, 30, are mounted at their inboard sides only. A gear case 17 is also mounted to the support member (on an opposite side of the support member). The pulleys include a drive pulley 20 and a driven pulley coupled by a drive belt which may be removed by passing the belt over the pulleys. The drive pulley is connected to the engine by an output shaft 31 which includes an isolation member 100. As seen in Figure 1, a housing encloses the entire engine and transmission.

3. Claims 1-3, 5, 8-10, 12, 13, 15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rioux et al. (USPN 5,685,387).

Rioux '387 shows a snowmobile with an engine 22 and a generally U-shaped support member (with side walls 40, 42, and a bottom wall, as seen in Figure 3). A drive pulley 20 is connected to an output shaft 31 by an isolation member 75 and to a driven pulley via a belt 16. Both pulleys are mounted to a side 42 of the support member on their inboard sides only. A gear

Art Unit: 3611

case 18 is mounted within the support member, as seen in Figure 3. The gear case contains at least two gears with a reduction ratio of about 1.5:1 to about 2.3:1.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 11, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rioux '387 in view of Juto.

Rioux '387 is silent regarding a water pump mounted to the support member. It also is also silent regarding clutches in both pulleys.

Juto shows a snowmobile with a water cooled engine having a water pump 50 mounted near the engine. It also teaches providing centrifugal clutches in both pulleys of the variable transmission 55.

It would have been obvious to a skilled artisan to water cool the engine, as is old and well known, and is taught by Juto, and therefore, include a water pump mounted near the engine. To mount the water pump near the engine, as taught by Juto, it would have to be supported by the support member, which is the only support for the engine and drive train. It would also have been obvious to one of ordinary skill in the art to provide the Rioux pulleys with centrifugal clutches, as taught by Juto, in order to facilitate drive ratio shifting.

Art Unit: 3611

6. Claims 6, 7, 16, 17, 22, 24-27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rioux et al. (USPN 5,607,026) in view of Rioux et al. (USPN 5,685,387) .

Rioux '026 shows all of the claimed features except for the gear case 17 mounted within the support member.

Rioux '387 teaches mounting a gear case 18 within the support member wall 40.

It would have been obvious to a skilled artisan to mount the gear case 17 of Rioux '026 within the support member, as taught by Rioux '026, in order to protect the gear case. Rioux '387 fails to disclose the gear ratio of the gearing in the case 17. However, Rioux '387 teaches a gear ration of between 1.5:1 and 2.3:1 for a fixed reduction gear set (see col. 2, lines 27-32). Therefore, it would have been obvious to provide gearing with a reduction ratio of 1.5 to 2.3:1, as taught by Rioux '387, in order to provide appropriate gear reduction for that type of vehicle.

Regarding claim 27, the references are silent regarding the use of cast aluminum for forming the frame. However, it is old and well known and would have been obvious to a skilled artisan to use aluminum in supporting structures of vehicles, in order to reduce the overall weight of the vehicle.

7. Claims 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rioux '026 and Rioux '387 as applied to claim 22 above, and further in view of Juto.

The combination is silent regarding an engine water pump mounted on the support and centrifugal clutches with the pulleys.

Art Unit: 3611

Juto shows a snowmobile with a water cooled engine having a water pump 50 mounted near the engine. It also teaches providing centrifugal clutches in both pulleys of the variable transmission 55.

It would have been obvious to a skilled artisan to water cool the engine, as is old and well known, and is taught by Juto and, therefore, include a water pump mounted near the engine. To mount the water pump near the engine, as taught by Juto, it would have to be supported by the support member, which is the only support for the engine and drive train. It would also have been obvious to one of ordinary skill in the art to provide the Rioux pulleys with centrifugal clutches, as taught by Juto, in order to facilitate drive ratio shifting.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yasui shows a snowmobile drive train with drive and driven pulleys between the engine and track. It also teaches providing a centrifugal clutch at the driven pulley and fixed reduction gearing between the driven pulley and track sprocket shaft.

Marier teaches providing a water pump for engine cooling and centrifugal clutch for the variable speed transmission. It also teaches making the frame out of aluminum.

Fukuda and Eto each show a snowmobile with a water cooled engine and centrifugal clutch in the drive pulley.

Teal, Samuelson et al, and Moss et al. Each show a snowmobile with a pair of pulleys on an outboard side of the vehicle.

Art Unit: 3611

Kurata shows a drive train with pulleys and reduction gearing.

Leonard shows an isolation member between an engine output shaft and a drive pulley.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Boehler whose telephone number is (703) 308-0422.

ambell 4/3/02

ANNE MARIE BOEHLER
Primary Examiner

boehler
April 3, 2002